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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/448,088	11/23/1999	EDWARD A. RICHLEY	D/98588	4649
47374	7590	09/21/2005		
LAW OFFICES OF PARTICK J.S. INOUE			EXAMINER	
810 THIRD AVENUE			LE, UYEN CHAU N	
SUITE 258			ART UNIT	
SEATTLE, WA 98104			PAPER NUMBER	
			2876	

DATE MAILED: 09/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/448,088

Applicant(s)

RICHLEY ET AL.

Examiner

Uyen-Chau N. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 and 3-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 3-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Appeal Brief***

1. In light of the Applicant's argument, see pages 7-15 of the Appeal Brief filed 05 July 2005, with respect to the rejection(s) of claim(s) 1 and 3-13 under 35 USC 103 rejections, the examiner withdraws the previous rejections. However, upon further consideration, a new ground(s) of rejection is made in view of the newly cited references to Theimer et al and DiMatteo et al.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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4. Claims 1, 3, 4, 6, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimer et al (US 5,793,630) in view of DiMatteo et al (US 4,402,608).

Re claims 1 and 3: Theimer et al discloses a system 10 for identification and tracking of tags [51, 40, 41, 42, 44] distributed in a room 12, the system 10 comprising, an infrared source station 45 for scanning infrared beams through a portion of the room 12, a tag [51, 40, 41, 42, 44] reactive to incident laser beams to provide a data signal, and a tag tracking system 10 receiving input from the infrared source station 45, the tag tracking system 10 storing state records of position and informational content of the tag [51, 40, 41, 42, 44], wherein the tag tracking system 10 determines position of the tag with respect to the infrared source station 45 (fig. 2; col. 5, lines 35-58 and col. 6, lines 50-67).

Theimer et al discloses an infrared source 45 for determining spatial boundaries and regions, which comprises different angles, of an object/tag [51, 40, 41, 42, 44] (col. 5, lines 35-58), but is silent with respect to utilize a laser base station or two laser base stations for determining an absolute angular position of the tag, respectively.

DiMatteo et al teaches a system for locating a 3D position of an object in room 12 using laser sensors (i.e., "master" sensor 10 and "slave" sensor 14) (col. 2, line 19 through col. 4, line 36 and col. 7, line 5 through col. 8, line 9).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to further employ the laser station(s) of DiMatteo et al into the system as taught by Theimer et al in order to provide Theimer et al with an alternative

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means for determining an absolute position of an object/tag within a room for tracing purposes, and due to the fact that the position determination device can lock onto the object/tag at one time rather than consistently looking for the object/tag and increasing the processing time.

Re claims 4, 6, 9 and 11: wherein the tag is passive; wherein the tag is active, having power supply to power an optical data output element (col. 6, line 47 through col. 7, line 25).

5. Claims 5-8 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Theimeret al as modified by DiMatteo et al as applied to claims 1 and 3 above, and further in view of Moran et al (US 6,005,482). The teachings of Theimeret al as modified by DiMatteo et al have been discussed above.

Re claims 5, 7-8, 10 and 12-13, Theimeret al/DiMatteo et al have been discussed above but fails to expressly disclose or fairly suggest that the tag is active, having an internal power supply to power a data broadcast element; an optical data output element; a radio data output element; an acoustic data output element.

Moran et al teaches the above limitation radio tags 110, infrared tags 116, acoustic tags 122 (figs. 2 & 3; col. 8, line 16 through col. 9, line 9).

It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to incorporate the teachings of Moran et al into the teachings of Theimeret al/DiMatteo et al in order to provide Theimeret al/DiMatteo et al with a diverse system wherein a single object/tag locating device can determine the position of various forms of tags including optical, radio, acoustic output means etc. Accordingly,

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one does not have to have "one" type of electronic tag but such modified system can accommodate a numerous types of electronic tags having different formats.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1 and 3-13 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The patents to Close (US 4595915 A); Raviv (US 4873651 A); Beirne (US 4912643 A); Harrison et al (US 5068916 A); Harrison (US 5181200 A); Gelbart et al (US 5920394 A); Richley et al (US 6798349 B1); Kacyra et al (US 6,847,462); Boultinghouse et al (US 4,796,198); Ake (US 5,000,564); Heller et al (US 5,387,993) are cited as of interest and illustrate a similar structure to a laser locating and tracking system for externally activated tags.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uyen-Chau N. Le whose telephone number is 571-272-2397. The examiner can normally be reached on First Monday 5:30AM-1:30PM and Tues-Fri 5:30AM-3PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee can be reached on 571-272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Uyen-Chau N. Le  
Examiner  
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September 16, 2005



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